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10/731,620	12/08/2003	Janaki Krishnaswamy	021756-003100US	4734

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EXAMINER	
PHAM, HUNG Q	
ART UNIT	PAPER NUMBER
2159	
MAIL DATE	DELIVERY MODE
06/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/731,620	KRISHNASWAMY ET AL.	
	Examiner	Art Unit	
	HUNG Q. PHAM	2159	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,8 and 10-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,8 and 10-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/08/2009 has been entered.

Response to Arguments

Claim Rejections - 35 USC § 101

The rejection under 35 U.S.C. § 101 has been withdrawn in view of the amendments.

Claim Rejections - 35 USC § 112

- Applicant's arguments with respect to the rejection under 35 U.S.C. § 112, 1st paragraph have been fully considered. The rejection of claim 1 under 35 U.S.C. § 112, 1st paragraph, has been withdrawn.

- The rejection of claim 1 under 35 U.S.C. § 112, 2nd paragraph, has been withdrawn in view of the amendments.

Claim Rejections - 35 USC § 103

Applicant's arguments with respect to the rejection under 35 U.S.C. § 103 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 8 and 14 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

Regarding claim 1, ***completeness validation*** is performed manually (Claim 1, Lines 21-24) and automatically (Claim 1, Lines 28-29). In light of the Specification of the current application, ***completeness validation*** is performed either manually or automatically (Specification, Paragraph 0028). Performing ***completeness validation*** both manually and automatically for the same set of object is unable to be implemented.

Regarding claim 8, ***the one or more correctness validation rules*** are applied by a selected validation via a user interface (Claim 8, Lines 14-17). The claim further recites that ***the one or more correctness validation rules*** are applied automatically (Claim 8, Lines 18-21). In light of the Specification of the current application, ***one or more correctness validation rules*** are performed either manually or automatically (Specification, Paragraph 0028). It is unable to perform ***one or more correctness validation rules*** both manually and automatically for the same set of object.

Regarding claim 14, ***one or more completeness validation rules*** are applied if a user manually selects validation (Claim 14, Lines 18-19). The claim further recites that ***one or more completeness validation rules*** are applied automatically (Claim 14, Lines 21-24). In light of the Specification of the current application, ***one or more completeness validation rules*** are performed either manually or

automatically (Specification, Paragraph 0028). It is unable to apply ***one or more completeness validation rules*** both manually and automatically for the same set of object.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 8 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 1, ***completeness validation*** is performed manually (Claim 1, Lines 21-24) and automatically (Claim 1, Lines 28-29). In light of the Specification of the current application, ***completeness validation*** is performed either manually or automatically (Specification, Paragraph 0028). Performing ***completeness validation*** both manually and automatically for the same set of object is unable to be implemented.

Regarding claim 8, ***the one or more correctness validation rules*** are applied by a selected validation via a user interface (Claim 8, Lines 14-17). The claim further recites that ***the one or more correctness validation rules*** are applied automatically (Claim 8, Lines 18-21). In light of the Specification of the current application, ***one or more correctness validation rules*** are performed either

manually or automatically (Specification, Paragraph 0028). It is unable to perform *one or more correctness validation rules* both manually and automatically for the same set of object.

Regarding claim 14, *one or more completeness validation rules* are applied if a user manually selects validation (Claim 14, Lines 18-19). The claim further recites that *one or more completeness validation rules* are applied automatically (Claim 14, Lines 21-24). In light of the Specification of the current application, *one or more completeness validation rules* are performed either manually or automatically (Specification, Paragraph 0028). It is unable to apply *one or more completeness validation rules* both manually and automatically for the same set of object.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 8 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, *completeness validation* is performed in response to a user entered command (Claim 1, Lines 21-24). The claim further recites *completeness validation* is performed automatically (Claim 1, Lines 28-29). It is unclear whether the *completeness validation* is performed manually or automatically.

Regarding claim 8, ***the one or more correctness validation rules*** are applied by a selected validation via a user interface (Claim 8, Lines 14-17). The claim further recites that ***the one or more correctness validation rules*** are applied automatically (Claim 8, Lines 18-21). It is unclear whether the rules are applied manually or automatically.

Regarding claim 14, ***one or more completeness validation rules*** are applied if a user manually selects validation (Claim 14, Lines 18-19). The claim further recites that ***one or more completeness validation rules*** are applied automatically (Claim 14, Lines 21-24). It is unclear whether the rules are applied manually or automatically.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 8 and 10-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Pastor et al. [US 6,681,383 B1].

Regarding claims 1, 8 and 14, Pastor teaches a system including one or more computer systems executing one or more computer programs and method for object model design and validation, the system and method comprising:

a client interface module communicatively coupled to a client device configured to receive user input and provide a user interface to a user (CASE tool allows a user to input the requirement. CASE tool is coupled to computer system 202 (Pastor, Col. 7-Lines 5-17. The CASE tool provides a user interface as in Pastor's FIG. 3);

a database configured to store (Pastor, FIG. 2, DATABASE SCHEMA 205)***:***

objects corresponding to an object model (Pastor, FIG. 4A, the objects in Pastor's FIG. 4A corresponds to *an object model* 300 of Pastor's FIG. 3), and

metadata objects describing the object model during design of the object model (Object model is a graphical model that allows the system designer to specify the entities employed in the application in an object-oriented manner by defining classes for the entities (Pastor, Col. 10-Lines 20-23). As shown in Pastor's FIG. 3, *metadata objects*, e.g., "book", "librarian", "loan", "reader"…, in the Conceptual Schema is used for describing *the object model* 300 during the design of the model), ***the metadata objects including information used to represent a collection of objects representing model classes, an object used to represent a single attribute of an object representing a model class, an object used to represent an association between two objects representing model classes, or an object used to represent one end of an association between two objects representing model classes*** (Classes, in the object model 300, are represented as rectangles with three areas: the class name, the attributes and the services (Pastor, Col. 10-Lines 29-32). The Pastor's teaching as discussed indicates *the metadata objects including information used to represent a collection of objects representing model classes*, e.g., "book", "librarian", "loan", "reader"…, in the Conceptual Schema includes class names, attributes and services that are used to represent a model class such as "loan");

a configuration management module configured to create a deployable collection of metadata objects from the metadata objects stored in the database (As shown in Pastor's FIG. 3, *a deployable collection of*

metadata objects from the metadata objects stored in the database, e.g., "loan", "book", "reader" and "librarian" are deployable from the meta objects in the Conceptual Schema),

wherein the deployable collection of metadata objects represents a tree of metadata objects starting at a root metadata objects (As shown in Pastor's FIG. 3, "loan", "book", "reader" and "librarian" represents a tree starting at the root "Conceptual Schema");

a validation engine for validating the metadata objects stored in the database by confirming the metadata objects comply with one or more validation rules (Pastor, FIG. 2, Col. 21-Lines 9-28)

wherein said validation engine is configured to:

perform completeness validation on the deployable collection in response to a user entered command to perform validation on the deployable collection as a validation subject to confirm that data associated with the validation subject complies with the validation rules (Pastor, Col. 22-Line 65→Col. 24-Line 21),

automatically perform correctness validation on the deployable collection when the validation subject is created or updated to confirm that the semantics of the validation subject complies with the validation rules (Pastor, Col. 21-Line 30→Col. 22-Line 64), and

automatically perform completeness and correctness validation on the deployable collection when requested by the configuration management module (Pastor, Col. 21-Line 30→Col. 24-Line 21).

Regarding claim 10, Pastor teaches all of the claimed subject matter as discussed above with respect to claim 8, Pastor further discloses ***the meta metadata object comprises an object used to represent an association between two objects representing model classes and wherein applying a validation rule to the instance of the meta metadata object by the processor includes applying the validation rule to the two objects associated by the association*** (Pastor, Col. 21-Line 30→Col. 22-Line 64).

Regarding claim 11, Pastor teaches all of the claimed subject matter as discussed above with respect to claim 8, Pastor further discloses ***automatically applying the one or more correctness***

validation rules using the processor to the instance of the meta metadata object if the instance of the meta metadata object is automatically updated or manually updated (Pastor, Col. 21-Line 30→Col. 22-Line 64).

Regarding claim 12, Pastor teaches all of the claimed subject matter as discussed above with respect to claim 11, Pastor further discloses *the meta metadata object is one of an attribute and an object* (Pastor, FIG. 3).

Regarding claim 13, Pastor teaches all of the claimed subject matter as discussed above with respect to claim 8, Pastor further discloses *the meta metadata object is one of an aggregated collection and a deployable collection* (Pastor, FIG. 3).

Regarding claim 15, Pastor teaches all of the claimed subject matter as discussed above with respect to claim 1, Pastor further discloses *a deployment manager to deploy the validated metadata objects during runtime* (Pastor, FIG. 3).

Regarding claim 16, Pastor teaches all of the claimed subject matter as discussed above with respect to claim 8, Pastor further discloses *after applying both the one or more correctness validation rules and the one or more completeness validation rules, deploying the object instance during runtime* (FIG. 3 and Col. 21-Lines 21-29).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAMES K. TRUJILLO can be reached on 571-272-3677. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HUNG Q. PHAM
Primary Examiner
Art Unit 2159

/HUNG Q. PHAM/
Primary Examiner, Art Unit 2159

June 16, 2009